

Re: exceedances from dunes

Meredith Kurpius to: ktupper

Cc: aarlingenet apcd, garcemont, jacontreras, kbrooks apcd, lallen

12/17/2012 01:11 PM

Thanks very much, Karl - this is very helpful!

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Meredith Kurpius, PhD Air Quality Analysis Office Air Division, US EPA 75 Hawthorne St., AIR-7 San Francisco.CA 94105 415-947-4534 (p) 415-947-3579 (f)

ktupper Meredith, This is Karl Tupper from SLOAPCD.... 12/14/2012 09:02:47 AM

From: ktupper@co.slo.ca.us

Meredith Kurpius/R9/USEPA/US@EPA. To:

aarlingenet apcd@co.slo.ca.us, lallen@co.slo.ca.us, garcemont@co.slo.ca.us, Cc:

jacontreras@co.slo.ca.us, kbrooks apcd@co.slo.ca.us

12/14/2012 09:02 AM Date:

Re: exceedances from dunes Subject:

Meredith,

This is Karl Tupper from SLOAPCD. Karen forwarded your email to me and asked me to reply. I ran some reports in AQS--presumably the ones you were trying to run--and attached the results.

To answer your specific questions:

Our highest site for both PM10 and PM2.5 is CDF (06-079-2007, 2391 Willow Rd, Arroyo Grande). At CDF there was 1 exceedence in 2010, none in 2011, and 3 (so far) in 2012--these were on 5/23, 5/24, and 6/8. Sampling began at this site in 2010 and has always been via continuous FEM, first by TEOM (POC 1), and now by BAM (POC 2).

Our 2012 DV for PM2.5 annual average is 10.8 ug/m3, and this is for CDF. Our 2012 DV for PM2.5 24-hr average is 29 ug/m3, and this is also for CDF.

According to AQS, for PM10 our 2012 design value is 1 estimated exceedence, and again the design value site is CDF. Question here, though: If you look at the DV report, it lists the TEOM (POC 1) and BAM (POC 2) seperately, and calculates design values for each. The thing is, these sites did not run at the same time, but rather they ran consecutively--POC 1 operated approximately Jan to July, 2010, and POC 2 from August 2010 onward. So it seems logical to combine the data from these POCs, in which case this site would have 4 exceedences in 3 years, so our design value should be 1.3 expected exceedences per year. How would EPA handle this site when determining attainment?

As for your last question, we haven't tried calculating DVs for CDF excluding days with dunes influences. Do you have any suggestions for how to do this? At any rate, I'm sure the DVs would be lower: In our "Phase Two" study of the SVRA (

http://www.slocleanair.org/images/cms/upload/files/pdf/PM2-final report.pdf) we found that our study site downwind of the riding area exceeded the state PM10 standard (50 ug/m3) ~75% more often than the control site which was downwind of a non-riding area of the dunes. Another line of evidence to consider comes from our "Trend Report", which we currently finalizing. I'll send you the draft in a seperate email,

because the file is so big ($^{\sim}$ 12 mb). In this report we look at seasonal PM averages, and at CDF and Mesa2 summers are always much higher.

Karl

Karl A Tupper Air Quality Specialist, Monitoring Unit Air Pollution Control District County of San Luis Obispo ph: 805.781.5912

email: ktupper@co.slo.ca.us web: www.slocleanair.org

-----Karen Brooks/APCD/COSLO wrote: -----

Kurpius.Meredith---12/13/2012 01:47:40 PM---Karen, Gary, and Jaime, We recently got a Congressional call regarding air quality impacts from

From: Kurpius.Meredith@epamail.epa.gov

To: garcemont@co.slo.ca.us, kbrooks_apcd@co.slo.ca.us, jacontreras@co.slo.ca.us

Date: 12/13/2012 01:47 PM

Subject: exceedances from dunes

Karen, Gary, and Jaime,

We recently got a Congressional call regarding air quality impacts from ORV in the Nipomo Dunes. I was not on the call and don't know the details except that the person was sympathetic to the air quality issues. When I know more and get the green light to share details, I would be happy to do so. In the meantime, there is a follow-up question about the air quality. I keep getting kicked off AQS so I thought I would ask you directly for the following information:

- -How many PM10 exceedances have there been in 2010, 2011, and 2012 at the highest site? What is the sampling frequency? Which site is the highest?
- -What is the 2010-2012 design value for PM2.5 both annual and daily? Is the high site the same as for PM10? Have you calculated what the DV would be without the impact of the dunes (i.e., what is the DV if you remove the days that also have high PM10)? You don't have to do this calculation if you haven't already I just thought it would be interesting to see if you had already done this.

Please feel free to share any other metrics that you have thought of for evaluating the impacts of the ORV on your local air quality. Thanks!

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